

Abstract of the Disclosure

When a signal of GSM 900 frequency band is transmitted, a bias voltage setting circuit sets an optimum bias voltage for the GSM 900 frequency band to a first stage amplifier and a second stage amplifier. The transmission signal is amplified by the two amplifiers. A signal that is output from the second stage amplifier is supplied to a low-pass filter. The low-pass filter attenuates unnecessary radiation waves from the transmission signal. A GSM 900 frequency band amplifier amplifies the output signal of the low-pass filter and outputs the amplified signal. When a signal of DCS 1800 frequency band is transmitted, the bias voltage setting circuit sets an optimum bias voltage for the DCS 1800 frequency band to the first stage amplifier and the second stage amplifier. A DCS 1800 frequency band amplifier amplifies an output signal of the second stage amplifier and outputs the amplified signal.